

Appl. No. 10/735,063  
Amdt. dated March 20, 2006  
Reply to Office Action of December 19, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) A composite vascular construct comprising a first, blood-contacting component and a second, tissue-contacting component, the first component comprising a load bearing textile construct having an activated, blood compatible surface, the blood compatible surface comprising sulfonic groups and having a biomolecule immobilized thereon, the second component comprising an absorbable construct for tissue ingrowth, wherein at least one of the first and second composites has at least transient occlusive properties.
2. (Currently amended) A composite vascular construct as set forth in claim 1 wherein the first component comprises a polypropylene fabric ~~having a biomolecule immobilized on the blood-contacting surface thereof~~.
3. (Original) A composite vascular construct as set forth in claim 1 wherein the second component comprises a compliant, absorbable film having transient occlusive properties.
4. (Currently amended) A composite vascular construct as set forth in claim 2 ~~wherein the blood-contacting surface of the first component comprises sulfonic groups and~~ wherein the biomolecule immobilized ~~thereon~~ on the

Appl. No. 10/735,063  
Amdt. dated March 20, 2006  
Reply to Office Action of December 19, 2005

blood compatible surface is ionically bound to a basic molecule, the basic molecule being ionically bound to the sulfonic groups.

5. (Currently amended) A composite vascular construct as set forth in claim 3 wherein the basic molecule comprises polylysine.
6. (Original) A composite vascular construct as set forth in claim 4 wherein the biomolecule comprises albumin.
7. (Original) A composite vascular construct as set forth in claim 4 wherein the biomolecule comprises fibrinogen.
8. (Original) A composite vascular construct as set forth in claim 3 wherein the absorbable film comprises a copolyester comprising repeat units derived from two or more cyclic monomers selected from the group consisting of caprolactone, p-dioxanone, glycolide, lactide, trimethylene carbonate, 1,5-dioxepan-2-one, morpholinedione, and a substituted morpholinedione.
9. (Original) A composite vascular construct as set forth in claim 8 wherein the tissue-contacting surface of the absorbable film comprises at least one bioactive compound.
10. (Original) A composite vascular construct as set forth in claim 8 wherein the tissue-contacting surface of the absorbable film comprises at least one cell growth promoter.
11. (Original) A composite vascular construct as set forth in claim 1 in the form of a vascular graft.

Appl. No. 10/735,063  
Amdt. dated March 20, 2006  
Reply to Office Action of December 19, 2005

12. (Original) A composite vascular construct as set forth in claim 1 in the form of an endovascular stent graft.
13. (Currently amended) A composite vascular construct as set forth in claim 1 in the form of ~~an~~ a vascular patch.
14. (Original) A composite vascular construct as set forth in claim 2 wherein the polypropylene fabric comprises a woven polypropylene fabric.
15. (Original) A composite vascular construct as set forth in claim 2 wherein the polypropylene fabric comprises a knitted polypropylene fabric.
16. (Original) A composite vascular construct as set forth in claim 1 wherein the second component comprises a compliant, absorbable, microporous sheath.
17. (Original) A composite vascular construct as set forth in claim 16 wherein the microporous sheath comprises a continuous cell foam.
18. (Original) A composite vascular construct as set forth in claim 16 wherein the microporous sheath comprises a non-woven nano/microfabric.
19. (Original) A composite vascular construct as set forth in claim 16 wherein the tissue-contacting surface of the microporous sheath comprises at least one bioactive agent.
20. (Original) A composite vascular construct as set forth in claim 16 wherein the tissue-contacting surface of the microporous sheath comprises at least one growth factor.

Appl. No. 10/735,063  
Amdt. dated March 20, 2006  
Reply to Office Action of December 19, 2005

21. (Currently amended) A composite vascular construct as set forth in claim 1 wherein the first component comprises a non-absorbable textile construct comprising fibers selected from the group consisting of polyester, polyether ester, polyether ether ketone, and polyamide, ~~the textile construct comprising immobilized biomolecules on the blood-contacting surface thereof.~~